

<p>91-325211/44 D25 HENK 02.04.90 HENKEL KGAA *WO 9115-567-A 25.03.91-WO-E00567 (+DE-010533) (17.10.91) C11d-17 Portioned pressed washing and cleaning agents - obt'd. by pressing compressed granules of premix made by extruding granular composn. through perforated die plate C91-140535 R(AT BE CH DE DK ES FR GB GR IT LU NL SE) N(US)</p>	<p>D(11-D3)</p>
<p>Washing and cleaning agents in the form of portioned pressed bodies are made by forming a premix of the granular washing or cleaning agent with a plasticiser and/or lubricant, extruding the mixt. through an orifice plate under a pres- sure of 5-200 (esp. 10-150) bar to form a compressed extruded granulate, and pressing the compressed granulate into portioned pressed bodies.</p>	<p>PREFERRED PROCESS A dissolution or disintegration assistant may be added to the prim. granulate prior to the final pressing in an amt. of < 15(pref. < 10) wt.%. A phlegmatisation agent may be added which is flowable at room temp. or slightly elevated temps., chosen from paraffin oils, ester oils and higher alcohols and/or their ethers which are flowable at room temp. and their homo- logues melting at moderately elevated temps. Pref. the pressed bodies are in the form of cylindrical or parallelepipedal tablets with a dia./height ratio of 0.5:2 to 2:0.5, and have a density of > 1 (pref. 1.1 - 1.5) g/cm³.</p>
<p>USE/ADVANTAGE The pressed bodies, esp. tablets, are stable upon storage, have a high shock and impact resistance, withstand handling and transport, and dissolve rapidly in the wash liquor. They are esp. useful for metering portioned amts. of washing and cleaning agents into washing machines etc.</p>	<p>EXAMPLE A premix had a composn. of 37 wt.% NaA zeolite, 15 wt.% Na dodecylbenzenesulphonate, 2 wt.% Na soap based on tallow fatty acid, 14 wt.% anhydrous soda, 4 wt.% water- glass, 6 wt.% Na salt of acrylic acid/maleic acid copolymer (Sokalan CP5, RTM), 6 wt.% 12-18 C fatty alcohol + 5 EO and 14 wt.% moisture, optical brightener, phosphonate and inorganic salts.</p> <p style="text-align: right;">WO9115567-A+</p>

<p>Pellets were made by extruding a water-contg. paste premix of the components through a die plate with 1.5 mm perforations, cutting the extrudate into 1.5 mm lengths and drying the granulate in a fluidised bed drier with an air stream at 75-80°C. A mixt. of 74.1 wt.% of the compressed granulate, 16 wt.% perborate monohydrate, 5.8 wt.% tetraacetylenediamine granulate, 2.5 wt.% silicone foam inhibitor and 1.6 wt.% enzyme (Savinase) was pressed into tablets 38 mm dia x 39.5 mm high with a wt. of 52g. The tablets had a density of 1.16 g/cm³ and a breaking strength of 80-90 N. When used in a domestic washing machine at 30°C, there was no residue of the tablets after a 30 min. wash period.(31pp513DAHDwgNo0/0). (G) ISR: No Search Report.</p>	<p style="text-align: right;">WO9115567-A</p>
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